

$\text{PbHAsO}_4$ ; this salt is widely used as an insecticide. The conditions most satisfactory for the electrolysis are: A current density between 1.25 and 1.875 amperes per square decimetre, a distance between the electrodes of from 2.5 to 5.0 centimetres, a bath containing from 1 to 2 per cent. of sodium chlorate as an electrolyte and approximately 0.05 per cent. arsenic acid. Lead arsenate forms as a precipitate during the electrolysis. If the precipitate be permitted to stand in contact with the bath solution for several days, the proportion of the salt  $\text{PbHAsO}_4$  is increased. When several per cent. of arsenic acid are added to the bath, the precipitate does not form, and lead is deposited on the cathode.

J. S. H.

### Measurement of the Pressure of the Sun's Atmosphere.

A. PEROT. (*Comptes Rendus*, April 3, 1922.)—About a year ago Perot pointed out the possibility of measuring pressures within gaseous masses by studying the connection between the pressure and the ratio of the wave-lengths of two radiations either emitted or absorbed by the gas. These two radiations must be differently affected by pressure. This procedure is independent in its results of both the Doppler and of the Einstein effects. The application of this method by its author to that region of the sun's atmosphere where the *b* lines of magnesium are absorbed indicated that the pressure there is practically zero. Later Salet found pressures of some tenths of an atmosphere to obtain where the iron lines originate in the sun and in certain stars. Now Perot has used five iron lines, two of which have a high pressure coefficient and the others a low one. He obtains these values for the pressure in the sun 38, 24 and 41 cm. of mercury, agreeing well with Salet's results.

An interesting by-product of these results is that they remove some anomalies in certain comparisons made by Fabry and Buisson and thus indirectly strengthen Einstein's law.

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